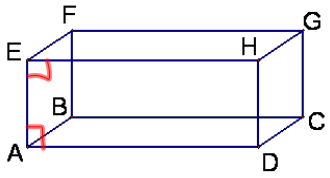
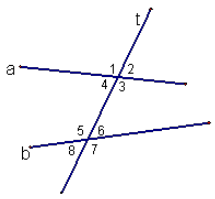
202 Review 3.1-3.4

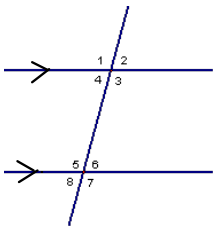
parallel lines/planes
skew lines



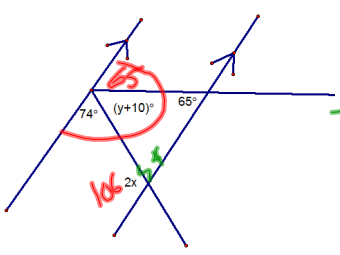
Types of Angles



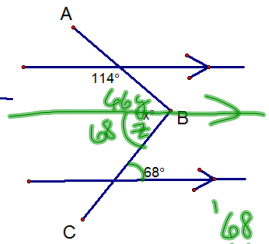
corresponding
$\angle 1 \cong \angle 5$
alt. int.
$\angle 4 \cong \angle 6$
alt ext
$\angle 1 \cong \angle 7$
same-side int (consecutive int) $\angle 5 \cong \angle 4$



If ll corr. $\angle$s $\cong$
If ll alt. int $\angle$s $\cong$
If ll alt ext $\angle$s $\cong$
If ll s-side int suppl.



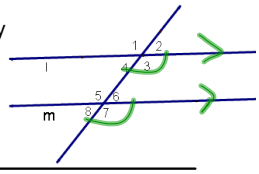
$2x + 74 = 180$
$2x = 106$
$x = 53$



$z = 68$
$y + 114 = 180$
$y = 66$

68
+66
134

Given: l || m
Prove: ∠2 and ∠7 are supplementary



Statements	Reasons
① $l \parallel m$	① Given
② $\angle 2 + \angle 3$ are suppl.	② Suppl. thm
③ $\angle 3 \cong \angle 7$	③ If ||, corr $\angle$s $\cong$
④ $m\angle 2 + m\angle 3 = 180$	④ def of suppl.
⑤ $m\angle 3 = m\angle 7$	⑤ def of $\cong$
⑥ $m\angle 2 + m\angle 7 = 180$	⑥ Subst.
⑦ $\angle 2 + \angle 7$ are suppl	⑦ def of suppl.

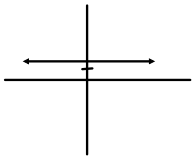
Find the slope of the line that passes through (6, -3) (8, -9).

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

parallel lines – same slope

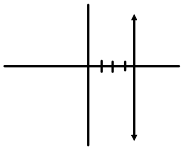
⊥ lines – opposite reciprocal slopes

Horizontal line



m = 0 equ: y = 2

Vertical line



no slope
undefined equ: x = 4